AMENDMENTS TO THE SPECIFICATION

Please amend paragraphs from page 18, line 18 to page 19, line 25 as follows:

As representative examples, Present invention sample (2) and Comparative example sample [[(4)]] (5), which had the same Nd content and exhibited highest (BH)max values, were subjected to the crystal texture observation by using a scanning electron microscope (SEM) provided with an energy dispersive mass spectrograph (EDX). The crystal grain diameter of Present invention sample (2) determined by measuring the length in the observation image was 3 to 4 μm, and grain boundary phases having a thickness of 0.2 μm or less, in which Nd and O were distributed at high concentrations between individual crystal grains, were observed by the secondary electron image observation. On the other hand, the crystal grain diameter of Comparative example sample [[(4)]] (5) was 0.2 μm or less and a clear grain boundary phase was not recognized.

In order to examine the direction of the c axis which was a easy-to-magnetize axis of the Nd-Fe-B crystal, a magnetism measurement was performed in two directions, perpendicular to the film formation surface and horizontal, for Present invention sample (2) and Comparative example sample [[(4)]] (5). As a result, the residual magnetization of the former sample measured in the perpendicular direction was 1.6 times that in the horizontal direction. Therefore, it was clearly estimated that the c axis was oriented in the direction perpendicular to the film surface. Furthermore, the X-ray diffraction pattern of this sample was measured. As a result, the diffraction line intensity of a (006) surface resulting from the $Nd_2Fe_{14}B$ crystal was remarkable and, therefore, the above-described c axis orientation was ascertained. On the other hand, the residual magnetization of the latter sample was different depending on the direction, and the

value measured in the perpendicular direction was 1.2 times that in the horizontal direction.

Please amend paragraph from page 22, line 18 to page 23, line 5 as follows:

On the other hand, for Comparative example samples (3) to (8), the difference between the (BH)max/1.2 and the (BH)max/2.4 was large, a high value was not able to be obtained unless the magnetization magnetic field was increased, and a value of 150 kJ/m^3 was obtained simply in the case where a high magnetic field was applied, for Comparative example sample (5). This is on the grounds that, as indicated by the initial magnetization curves and the demagnetization curves of Present invention sample (2) and Comparative example sample [[(4)]] (5) shown in Fig. 3, the former exhibits a steep rising edge of magnetization whereas that of the latter is gentle. The reason for this is estimated to be the difference in crystal texture.

Please amend paragraphs from page 23, line 21 to page 25, line 8 as follows:

The inside of the sputtering apparatus was evacuated. Thereafter, an Ar gas was introduced, the inside of the apparatus was maintained at 1 Pa, and the substrate was rotated at 6 rpm. First, reverse sputtering was performed for 10 minutes, while an RF output of 100 W and a DC output of 10 W were applied. Subsequently, sputtering was performed for 10 minutes, while an RF output of 100 W and a DC output of 150 W were applied, so that Ti substrate films were formed on both surfaces of the substrate. The resulting substrate provided with Ti films formed thereon was transferred to the front chamber of the apparatus, and sputtering was performed for 80 minutes, while an RF of 200 W and a DC of 400 W were applied, so that Nd-Fe-B films were formed on both surfaces of the above-described substrate. Furthermore, the resulting substrates were charged into an electric furnace placed in an Ar gas atmosphere, and were heated at 600°C

to 1,250°C for 30 minutes, followed by furnace cooling, so that various samples, in which crystal grain diameters were differentiated due to the difference in heat treatment temperature, that is, Reference sample, Present invention samples [[(5)]] (6) to (9) and Comparative example samples (9) and (10) were prepared.

With respect to the thicknesses of individual films, a part of the substrate was masked in advance, a film was formed under the same sputtering condition, and measurement was performed with a surface roughness meter. As a result, a Ti film was 0.15 μm, and a Nd-Fe-B film was 20 μm. The amount of Nd in the Nd-Fe-B film was 33.2 percent by mass. Every sample after the heat treatment was observed by using the SEM apparatus provided with an EDX analysis function, and the $Nd_2Fe_{14}B$ crystal grain diameter was determined from the image thereof. According to the secondary electron image observation, in Present invention sample [[(5)]] (6) to (9), grain boundary phases having a thickness of about 0.1 μm, in which Nd and O were distributed at high concentrations between individual crystal grains, were observed. On the other hand, in Comparative example samples (9) and (10), a clear grain boundary phase was not recognized.

At Page 25, from line 14 please delete [Table 2] in its entirety and substitute therefore the following [Table 2].

[Table 2]

Sample	Heat treatment temperature (°C)	Crystal grain diameter (μm)	Br/1.2 (T)	Hcj/1.2 (MA/m)
Comparative example sample (9)	600	0.2	0.58	1.18
Reference sample	700	0.7	0.83	1.22
Present invention sample (6)	800	3.1	1.03	1.15
Present invention sample (7)	900	9.2	1.18	1.12
Present invention sample (8)	1000	18	1.19	0.93
Present invention sample (9)	1200	28	1.16	0.74
Comparative example sample (10)	1250	35	0.87	0.38

Please amend paragraph from page 26, line 14 to line 24 as follows:

Fig. 4 shows the relationship of the crystal grain diameter with (BH)max/1.2 and (BH)max/2.4 of each sample. According to Fig. 4, as the crystal grain diameter is increased, the value of (BH)max/1.2 becomes close to the value of (BH)max/2.4, that is, the tendency toward an improvement of the magnetization characteristics is shown. Furthermore, (BH)max/2.4 is 150 kJ/m^3 or more for Present invention ~~samples (5) to~~ sample (9) in which the crystal grain diameter is ~~0.7 to 27~~ 28 μm, 200 kJ/m^3 or more for the samples (6) to (8), and 245 kJ/m^3 at a maximum. Therefore, a high maximum energy product was obtained.